

a plurality of control circuits each configured to output a control signal[s] for controlling the optical wavelength of said laser diode in different control modes, wherein each control mode is based on different control parameters representing external conditions detected by said control circuits that cause a wavelength variation; and

a selector arranged so as to select at least one of said control modes according to the status of electrical signals representing the external conditions of said laser diode, and to apply a control signal[s] output from said selected control circuit to said laser diode, thereby achieving stabilizing control of optical wavelength with said selected control mode.

18. (Amended) An optical signal transmitter comprising:

11/27  
a laser diode for outputting an optical signal to be transmitted;  
a driving current source for driving said laser diode;  
a parameter deviation detector to detect a first control deviation of one parameter responsible for causing variations of optical wavelength output from said laser diode from a predetermined target value;

an optical wavelength deviation detector to detect a second control deviation of optical wavelength output from said laser diode from a predetermined target value;

a selector connected to said detectors so as to select either of said first and second control deviations; and

a [manipulator] controller arranged to [manipulate] control one of said parameters so that said selected control deviation is reduced.

21. (Twice amended) An optical signal transmitter according to claim [2] 18, wherein said selector is constructed so as to select said second control deviation when said second control deviation is stably detected by said optical wavelength deviation detector, and to select said first control deviation when said second control deviation is not stably detected.

25. (Amended) A control apparatus for stabilizing the wavelength of light output from a laser element, comprising:

a plurality of control circuits configured for outputting control signals to control the optical wavelength of said laser element in respectively different control modes, wherein each control mode is based on different control parameters representing external conditions detected by said control circuits that cause a wavelength variation, and

selecting means for selecting at least one of control signals output from said control circuits according to the status of electrical signals representing the external conditions of said laser element, and applying [a] the selected control signal [output from said selected control circuit] to said laser element, thereby achieving stabilizing control of optical wavelength with said [selected] different control modes selectively according to the external conditions of said laser element.

27. (Amended) A control method for stabilizing the wavelength of light output from a laser element, comprising the steps of:

selecting at least one of a plurality of control circuits, configured to [for] output[ting] a control signal[s] for controlling the optical wavelength of said laser element in respectively